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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,299	06/05/2001	Kenji Kawazoe	MEIC:108	5706

7590 03/27/2003

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EXAMINER

WARREN, MATTHEW E

ART UNIT	PAPER NUMBER
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2815

DATE MAILED: 03/27/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/873,299

Applicant(s)

KAWAZOE ET AL.

Examiner

Matthew E. Warren

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

Figure 12 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Togari et al. (US 5,719,372).

With respect to claim 1, Togari et al. shows (fig. 3) a laser processing apparatus comprising a laser generator (1) for generating laser light, a laser controller (109) for controlling the laser generator, a positioning unit for positioning the laser light (107 and

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108), and a position controller (111) for controlling a position of the positioning unit in a manner according to a moving distance of the positioning unit (col. 3, lines 23-63).

Claims 1 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by the Applicant's Prior Art Figure (APAF) 12.

With respect to claim 1, the APAF 12 shows a laser processing apparatus comprising a laser generator (16) for generating laser light, a laser controller (7) for controlling the laser generator, a positioning unit for positioning the laser light (15), and a position controller (9) for controlling a position of the positioning unit in a manner according to a moving distance of the positioning unit.

With respect to claim 6, the APAF discloses (pg. 3, lines 3-9) that the apparatus further comprises an acceleration/deceleration constant memory for storing an acceleration/deceleration constant corresponding to the moving distance, wherein the position controller controls the position of the positioning unit with using the acceleration/deceleration constant.

With respect to claim 7, the APAF discloses (pg. 3, lines 3-9) discloses that the apparatus further comprises an acceleration/deceleration constant calculating unit for calculating an acceleration/deceleration constant corresponding to the moving distance from the moving distance, wherein the position controller controls the position of the positioning unit with using the acceleration/deceleration constant.

With respect to claim 8, the APAF discloses (pg. 2, lines 18-22 and pg. 3, lines 3-9) that the apparatus further comprises an waiting-for-settling time memory for storing a

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waiting time for settling corresponding to the moving distance, wherein the position controller controls the position of the positioning unit with using the waiting time for settling.

With respect to claim 9, the APAF discloses (pg. 2, lines 18-22 and pg. 3, lines 3-9) discloses that the apparatus further comprises a waiting-for-settling time calculating unit for calculating a waiting time for settling corresponding to the moving distance from the moving distance, wherein the position controller controls the position of the positioning unit with using the waiting time for settling.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's Prior Art Figure 12 in view of Kuriyama et al. (US 5,670,068).

With respect to claims 2-5, the APAF 12 shows all of the elements of the claims except the control method memory and the moving distance less than a first, third, fourth or greater threshold.

Kuriyama et al. discloses (col. 6, lines 19-35) that a laser apparatus comprises a control method memory for storing a control method corresponding to the moving distance of the galvano (positioning unit), wherein the galvano (position) controller

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controls the position of the galvano (positioning) unit by the control method. This configuration reduces heat generated by the galvano scanner and ultimately corrects errors. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the laser processing apparatus of the APAF 12 by implanting a control method memory and method as taught by Kuriyama et al. to reduce the errors caused by heating of the galvano/positioning scanner.

With respect to claims 3-5, neither reference discloses a moving distance less than a first, third, or fourth threshold, however it would have been obvious to one of ordinary skill in the art at the time the invention was made to set a moving distance at a desired threshold, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sousa et al. (US 6,222,870 B1), Clark et al. (US 5,969,851), Tissue (US 5,450, 202), Senda (JP 2001-246484), and Sekine (JP 2002-40356) also show laser processing apparatuses for controlling a laser.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Warren whose telephone number is (703) 305-0760. The examiner can normally be reached on Mon-Thurs, and alternating Fri, 9:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (703) 308-1690. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

MEW
MEW
March 21, 2003



EDDIE LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800